



UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/591,349 06/09/00 BOUCINO

T 9040.7

020792  
MYERS BIGEL SIBLEY & SAJOVEC  
PO BOX 37428  
RALEIGH NC 27627

MM91/0531

EXAMINER

NGUYEN, C

ART UNIT

PAPER NUMBER

2831  
DATE MAILED:

7  
05/31/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/591,349

Applicant(s)

BOUCINO, THOMAS

Examiner

Chau N Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) 1-4, 14, 15, 18-24, 27-39 and 42-45 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 40 and 41 is/are allowed.
- 6) ☒ Claim(s) 5-13, 25 and 26 is/are rejected.
- 7) ☒ Claim(s) 16 and 17 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

## DETAILED ACTION

### *Election/Restrictions*

1. Applicant's election with traverse of claims 5-13, 16, 17, 24-28, 40 and 41 in Paper No. 5 is acknowledged. The traversal is on the ground(s) that a complete search for claims 5 and 9 would require searching for the subject matter of all of the embodiments of Figures 3, 4 and 5. This is not found persuasive because claims 5 and 9 call for "only a portion thereof" to be increased or decreased. Figures 3 and 5, on the other hand, have more than one increasing or decreasing portion. The requirement is still deemed proper and is therefore made FINAL.

Furthermore, claims 24, 27 and 28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species. Specifically, the wall portions of Figure 4 do not have a sawtooth shaped cross-section, and the first thickness and the second thickness are not the same.

### *Renumbering the Claims*

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered

consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 38 been renumbered 39.

*Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 5-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Boucino et al. (5,969,295).

Boucino et al. discloses a communications cable comprising a cable jacket, a spacer (Fig. 3) extending within the cable jacket, the spacer having a longitudinally extending center portion and plurality of longitudinally extending wall portions radiating from the center portion, the wall portions increasing in thickness over only a portion (near the jacket) thereof from the center portion to the jacket, the spacer and the jacket defining a plurality of compartments within the cable jacket,

and a twisted pair of insulated conductors disposed in one of the compartments (claim 5). Boucino et al. also discloses a plurality of twisted pairs being disposed in respective ones of the compartments (claim 6), each of the twisted pairs having a different lay length (claim 7), the compartments having a helical configuration and the twisted pairs extend helically about the longitudinal axis of the cable (claim 8).

5. Claims 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Gaeris et al. (5,789,711).

Gaeris et al. discloses a communications cable comprising a cable jacket, a spacer (Figs 1&2) extending within the cable jacket, the spacer having a longitudinally extending center portion and plurality of longitudinally extending wall portions radiating from the center portion, the wall portions decreasing in thickness over only a portion (near the jacket) thereof from the center portion to the jacket, the spacer and the jacket defining a plurality of compartments within the cable jacket, and a twisted pair of insulated conductors disposed in one of the compartments (claim 9). Gaeris et al. also discloses a plurality of twisted pairs disposed in respective ones of the compartments (claim 10).

6. Claims 13, 25 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Ikeda et al. (JP4-332406).

Ikeda et al. discloses a communications cable comprising a cable jacket (see the abstract), a spacer (Fig. 1) extending within the cable jacket, the spacer having a longitudinally extending center portion and plurality of longitudinally extending wall portions radiating from the center portion, the wall portions having a first radial section (a first thickness near the jacket) that increases in thickness with distance from the center portion, a second radial section (the middle section or a third thickness) that decreases in thickness with distance from the center portion, the spacer and the jacket defining a plurality of compartments within the cable jacket, and a twisted pair of insulated conductors disposed in one of the compartments (claim 13). Ikeda et al. also discloses a second thickness (near the center portion) wherein the third thickness is located between the first and second thicknesses and is different from the first and second thicknesses (claim 25). Ikeda et al. also discloses the first, second and third thicknesses are different from one another (claim 26).

*Claim Rejections - 35 USC § 103*

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaeris et al. in view of Boucino et al.

Gaeris discloses the invention as claimed including the compartments having a helical configuration and the twisted pairs extending helically about the longitudinal axis of the cable (claim 12). Gaeris et al. does not specifically disclose each of the twisted pairs having a different lay length (claim 11). Boucino et al. discloses a communications cable comprising a plurality of twisted pairs, each having a different lay length. It would have been obvious to one skilled in the art to provide each twisted pair of Gaeris et al. with a unique lay length which is different from one another to improve the cross-talk among the pairs as taught by Boucino et al.

*Allowable Subject Matter*

9. Claims 16 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
10. Claims 40 and 41 are allowed.
11. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or suggest a communications cable comprising features as recited in the claims and in combination with the wall portions having a convex shaped cross-section (claims 16 and 40).

*Cited Art*

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Stecker discloses a reinforcing member comprising wall portions extending from a center portion.

*Communication*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 308-0693. The examiner can normally be reached on Mon-Fri.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308 3682. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308 3431 for regular communications and (703) 305 1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Chau N Nguyen  
Examiner  
Art Unit 2831

CN  
May 28, 2001